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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=10; day=30; hr=15; min=29; sec=17; ms=198;  
]

=====

\*\*\*\*\*

Reviewer Comments:

<210> 53

<211> 17

<212> RNA

<213> Artificial Sequence

<220>

<223> 5' end flanking sequence

<400> 53

agcucgaccu cagaucu

17

The above <223> response: please try to give more information regarding the source of the genetic material. This type of response also appears in subsequent sequences.

<210> 83

<211> 38

<212> RNA

<213> Artificial Sequence

<220>

<223> synthetically generated sequence

<221> misc\_feature

<222> (1)...(38)

<223> n = A,T,C or G

<400> 83

nnnnnnnnncu gaugaguccg ugaggacgaa annnnnnnn

38

Since the above <212> response is "RNA," "n" cannot represent "T"; it can only represent "U."

(end of Sequence 85)

atTTTgggtt acacatttac aagcaactta tataataata ctaa

7904

1

Please remove the "1" above, which appears at the end of the submitted file.

\*\*\*\*\*

Application No: 10519122 Version No: 2.0

**Input Set:****Output Set:**

**Started:** 2008-10-28 15:21:21.722  
**Finished:** 2008-10-28 15:21:23.716  
**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 994 ms  
**Total Warnings:** 85  
**Total Errors:** 2  
**No. of SeqIDs Defined:** 85  
**Actual SeqID Count:** 85

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

**Input Set:**

**Output Set:**

**Started:** 2008-10-28 15:21:21.722  
**Finished:** 2008-10-28 15:21:23.716  
**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 994 ms  
**Total Warnings:** 85  
**Total Errors:** 2  
**No. of SeqIDs Defined:** 85  
**Actual SeqID Count:** 85

Error code	Error Description
	This error has occurred more than 20 times, will not be displayed
W 402	Undefined organism found in <213> in SEQ ID (85)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (85)

# SEQUENCE LISTING

<110> Clawson, Gary A.  
 Pan, Wei-Hua  
 Thiboutot, Diane  
 Christensen, Neil

<120> METHODS AND MATERIALS FOR TREATING HUMAN  
 PAPILLOMAVIRUS INFECTIONS

<130> 14017-008US1

<140> 10519122

<141> 2005-08-08

<150> PCT/US03/20340

<151> 2003-06-26

<150> US 60/449,066

<151> 2003-02-21

<150> US 60/417,997

<151> 2002-10-14

<150> US 60/391,795

<151> 2002-06-26

<160> 85

<170> FastSEQ for Windows Version 4.0

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<211> 17

<212> DNA

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<223> primer

<400> 1

caggaaacag ctatgac

17

<210> 2

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17

<210> 3

<211> 67

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 <222> (1)...(67)  
 <223> n = A,T,C or G  
  
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 ttttaca 67  
  
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 <220>  
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gcctctgcgt ttaggtg	17
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<400> 49  
 agcaacgacc cttccac 17

<210> 50  
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<221> misc\_feature  
 <222> 18  
 <223> thymine is inverted

<400> 50  
 agcaacgacc cttccact 18

<210> 51  
 <211> 23  
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<220>  
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<400> 51  
 cugaugaguc cgugaggacg aaa 23

<210> 52  
 <211> 38  
 <212> RNA  
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<220>  
 <223> exemplary sequence

<400> 52  
 uguggucuga ugaguccgug aggacgaaac uuucuggg 38

<210> 53  
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 <212> RNA  
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<220>  
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<400> 53  
 agcucgaccu cagaucu 17

<210> 54  
 <211> 39

<212> RNA  
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 <223> 3' end flanking sequence  
  
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 caauugaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaguc 39  
  
 <210> 55  
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 <212> RNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> 5' end flanking sequence  
  
 <400> 55  
 gguuccagga ucc 13  
  
 <210> 56  
 <211> 39  
 <212> RNA  
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 <220>  
 <223> 3' end flanking sequence  
  
 <400> 56  
 gaauucaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaguc 39  
  
 <210> 57  
 <211> 38  
 <212> RNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> target sequence  
  
 <400> 57  
 ccacaccuga ugaguccgug aggacgaaac cuuuaggu 38  
  
 <210> 58  
 <211> 38  
 <212> RNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> target sequence  
  
 <400> 58  
 caaaaucuga ugaguccgug aggacgaaaa agugucua 38  
  
 <210> 59  
 <211> 38  
 <212> RNA  
 <213> Artificial Sequence



<220>  
 <223> target sequence

<400> 59  
 agcaaccuga ugaguccgug aggacgaaac ccuuccac 38

<210> 60  
 <211> 76  
 <212> DNA  
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<220>  
 <223> target sequence (combined DNA and RNA)

<400> 60  
 agcaaccuga ugaguccgug aggacgaaac ccuuccaccc acaccugaug aguccgugag 60  
 gacgaaaaaag tgtcta 76

<210> 61  
 <211> 76  
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<400> 61  
 agcaaccuga ugaguccgug aggacgaaac ccuuccacca uaaucugaug aguccgugag 60  
 gacgaaaaaag ugucua 76

<210> 62  
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 <212> RNA  
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<220>  
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 agcaaccuga ugaguccgug aggacgaaac ccuuccacag caaccugaug aguccgugag 60  
 gacgaaaccc uuccac 76

<210> 63  
 <211> 94  
 <212> RNA  
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<220>  
 <223> target sequence

<400> 63  
 agcucgaccu cagaucuagc aaccugauga guccgugagg acgaaacccu uccaccaauu 60  
 gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aguc 94

<210> 64  
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<212> RNA  
 <213> Artificial Sequence

<220>  
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<400> 64  
 agcucgaccu cagaucuagc aaccugauga guccgugagg acgaaacccu uccacagcaa 60  
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 aaaaaaaaaag uc 132

<210> 65  
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<220>  
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 gttgcagagg ctagctacaa cgagtggagg c 31

<210> 66  
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<220>  
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<400> 66  
 ctatttcagg ctagctacaa cgaacaacgg c 31

<210> 67  
 <211> 31  
 <212> DNA  
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<220>  
 <223> target sequence

<400> 67  
 agcaacgagg ctagctacaa cgaccttcca c 31

<210> 68  
 <211> 15  
 <212> DNA  
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<220>  
 <223> catalytic core sequence

<400> 68  
 ggctagctac aacga 15

<210> 69  
 <211> 31

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 agcaacgagc ctagctacta cgaccttcca c 31  
  
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 <211> 31  
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 <223> target sequence  
  
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 <211> 31  
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accacggcac tgattttcag t

21

<210> 75

<211> 25

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<400> 75

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25

<210> 76

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetically generated polypeptide

<400> 76

His Gly Arg Leu Val Thr Leu Lys Asp Ile Val Leu Asp Leu Gln Pro

1 5 10 15

Cys

<210> 77

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetically generated polypeptide

<400> 77

Met Glu Ser Lys Asp Ala Ser Thr Ser Ala Thr Ser Ile Asp Gln Leu

1 5 10 15

Cys

<210> 78

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetically generated polypeptide

<400> 78

Leu Glu Leu Gln Gly Lys Ile Asn Gln Tyr Arg His Phe Asn Tyr Ala

1 5 10 15

Cys

<210> 79

<211> 17

<212> DNA

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<220>

<223> exemplary sequence

<400> 79

tgtaaaacga cggccag

17

<210> 80

<211> 67

<212> DNA

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<223> synthetically generated template (complementary strand)

<221> misc\_feature

<222> (1)...(67)

<223> n = A,T,C or G

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60

67

<210> 81

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<213> Artificial Sequence

<220>

<223> exemplary sequence (5' end)

<400> 81

aaaaaaaaaa aaaaaaa

17

<210> 82

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> exemplary sequence (3' end)

<400> 82

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17

<210> 83

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 <223> n = A,T,C or G

<400> 83  
 nnnnnnnncu gaugaguccg ugaggacgaa annnnnnn

38

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 <223> n = A,T,C or G

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31

<210> 85  
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 <213> Human papilloma virus 16

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 ttagtataaaa agcagacatt ttatgcacca aaagagaact gcaatgtttc aggaccacaca 120  
 ggagegaccc agaaagttac cacagttatg cacagagctg caaacaacta tacatgatat 180  
 aatattagaa tgtgtgtact gcaagcaaca gtactgcga cgtgaggat atgactttgc 240  
 ttttcgggat ttatgcatag tatatagaga tgggaatcca tatgctgtat gtgataaatg 300  
 tttaaagttt tattctaaaa ttagtgagta tagacattat tgttatagtt tgtatggaac 360  
 aacattagaa cagcaatata acaaaccgtt gtgtgatttg ttaattaggt gtattaactg 420  
 tcaaaagcca ctgtgtcctg aagaaaagca aagacatctg gacaaaaagc aaagattcca 480  
 taatataagg ggtcgggtgga ccggtcgatg tatgtcttgt tgcagatcat caagaacacg 540  
 tagagaaacc cagctgtaat catgcatgga gatacaccta cattgcatga atatatgtta 600  
 gatttgcaac cagagacaac tgatctctac tgttatgagc aattaaatga cagctcagag 660  
 gaggaggatg aaatagatgg tccagctgga caagcagaac cggacagagc ccattacaat 720  
 attgtaacct tttgttgcaa gtgtgactct acgcttcggg tgtgcgtaca aagcacacac 780  
 gtagac